THE BRIDGE SCHOOL

Summer Institute: CVI/AAC

This 2022 The Bridge School launched its first annual Summer Institute. The topic of this weeklong institute was CVI and AAC, so as part of our partnership with Dr. Christine Roman-Lantzy, internationally known expert on Cortical Visual Impairment (CVI), we put together a strong comprehensive program for professionals and families.

We believe in the importance of an Interprofessional Collaborative Practice Approach, which is of special importance when working with children who have CVI and use Augmentative and Alternative Communication (AAC), so for this institute we had 40 professionals ranging from Teachers of the Visually Impaired, Speech and Language Pathologist, Special Education Teachers, Psychologists, Occupational Therapists and Assistive Technologists who conformed interprofessional teams that worked with 10 students who have CVI and use AAC.

This interprofessional practice and collaborative work could be seen in the variety of areas of specialty of our speakers, while highlighting the high caliber, professionalism, dedication and expertise of each one of them. This year, we were honored to have the participation of the following speakers:

Aileen Arai has been a Special Educator for 27 years. She has been designing and supporting staff in implementing strategies that support students, parents, districts, and all members of a student's educational team in the development of curriculum within the Common Core State Standards for students with significant physical impairments who use AAC systems. Since 2012 she has been addressing intervention strategies and assessments as they relate to Cortical Visual Impairment protocols and tools developed by Dr. Christine Roman-Lantzy. She received The Perkins-Roman CVI Range Endorsement from The Perkins School for the Blind, an authorization that supports her evaluating a student's CVI for purposes of ongoing intervention.

Christine Roman-Lantzy is The former Director of Pediatric View in Pittsburgh Pennsylvania. She was the first CVI Project Leader for The American Printing House for the Blind. Christine provides workshops and consultations through CVI Resources and has had the honor to be invited to all parts of The United States and many countries outside The U.S. She is the author of *Cortical Visual Impairment: An Approach to Assessment and Intervention (2007, 2018)* which won The Bledsoe Award in 2008, and *Cortical Visual Impairment: Advanced Principles (2019).* She taught at The University of Pittsburgh and Marshall University Graduate College for a total of 17 years.

Christine Wright-Ott is an internationally known Occupational Therapist who specializes in research and development of assistive technology for children with complex communication needs and severe physical disabilities. She has been a consultant at The Bridge School for over 15 years where she integrated self-initiated mobility into the educational curriculum.

Christine was the principal investigator and designer of the KidWalk, Gobot and MiniBot Projects, while working at the former Rehabilitation Engineering Center at Stanford. She has worked at California Children's Service, Children's Hospital at Stanford and West Valley College High Tech Center. She is a frequent lecturer at international and national conferences and local universities. She has authored the chapter "Mobility" in previous and now the 7th Edition of the book, Occupational Therapy for Children.

Elisa Kingsbury is a Speech and language pathologist with over 25 years of experience providing school-based AAC services. Collaborated with and learned from children, families, and professionals at The Bridge School and in Berkeley, Alameda and Mt Diablo Unified School Districts. In her 19 years at Bridge School, she worked in the Elementary, Transition and Research programs and helped to develop the Preschool program adapting the Language-Focused Curriculum from the Language Acquisition Preschool at the University of Kansas.

Providing children with access to play, movement and language has been a joy for her. Working with a team to improve a child's communication outcomes and enhance their quality of life has been the most meaningful work she could imagine.

Gabriela Berlanga, is a Speech and Language Pathologist and is the founder and consultor for CATIC in Mexico city, current Associate Executive Director at the Bridge School and Vice-President for Conferences at ISAAC (The International Society for Augmentative and Alternative Communication).

Founder and member of the North American Alliance for Communication Access.

Consultant for the Special Education Technology Department @prende of the Ministry of Education in Mexico.

She has collaborated with Dr. Christine Roman-Lantzy since 2011 as part of CATIC's International Collaboration Program run by Dr. Sarah Blackstone.

The Enos family has a genuine love for the Bay Area. Anna and Joey proudly have deep family roots in the Bay Area that go back generations. After commuting for two years, the family recently moved from Oakland to San Mateo to be closer to the Bridge School. Anna majored in fine arts at UC Santa Cruz, and the year Sammy was born, Joey received his Masters of Fine Arts from UC Berkeley. With a background in art and music, Sammy's parents have always incorporated these modalities into all aspects of Sammy's life. His diagnosis of cerebral palsy and CVI made communication and education challenging. Yet, through his intense and early love for music and books, it was clear Sammy had an undeniable need to communicate and learn. At age 3, Sammy received an early intervention evaluation from AAC Specialist Judith Lunger-Bergh and reached out to the Bridge School. With the curriculum focus, specialization in AAC and CVI, the family knew that The Bridge School was the school Sammy needed to reach his full potential. Sammy has been at The Bridge School for three years. He is thriving in this fun, creative, and engaging environment.

Lynn Elko is first and foremost a Mom. Her daughter, Emma, 20, began to benefit from CVI adaptations and interventions at age 15. After learning how profoundly CVI impacts everything in a child's world and witnessing Emma's life change after implanting intentional, strategic CVI interventions, Lynn became a fierce advocate for children with CVI and supporting their needs.

In previous iterations of her life, she was a VP of Production for an educational professional development company, working with organizations such as NASSP, NAESP and the Joseph P. Kennedy Jr. Foundation**,** and a social entrepreneur for which she received her Chamber's Businessperson of the Year award. She, along with 2 other CVI Moms, was honored with the Hall of Fame award in 2019 from the Pediatric Cortical Visual Impairment Society for spearheading the development of the PCVIS.vision website.

When Emma's life and medical needs are not shifting their family's axis, Emma and Lynn's collaborative efforts to make learning, life and communication accessible to her through a CVI adapted, custom AAC system can be found at See CVI, Speak AAC (@seeCVIspeakAAC).

Matt Tietjen is a certified teacher of students with visual impairments and an education consultant for the Bureau of Education and Services for the Blind (BESB).

He is a CVI specialist who has completed the 2 year CVI Leadership Institute as well as the Perkins-Roman CVI Endorsement.

He is a nationally and internationally recognized speaker.

Rebecca Matthews is a Speech Language Pathologist at The Bridge School. Received her M.S. In Speech Language and Hearing Sciences from San Francisco State University where she was a member of the Project Building Bridges grant specializing in AAC.
Did her school internship at The Bridge School and continued as a Clinical Fellow and eventually fully licensed SLP.
She works in the elementary classroom where she is a member of an interdisciplinary team and co teach alongside the special educator.

Sarah Blackstone is a world recognized SLP and AAC specialist.
Past president and fellow of ISAAC (The International Society for Augmentative and Alternative Communication).
Member of the Board of Directors of The Bridge School.
Director, CVI/AAC Project at The Bridge School.
Author: *Social Networks: A Communication Inventory for Individuals with CCN and their Community Partners, Patient Provider Communication: Roles for SLPs and other Health-care professionals*. "Retired": Augmentative Communication Inc., AAC-RERC, Berkeley Unified School District, Kennedy Institute/Johns Hopkins Medical School, Pittsburgh Rehabilitation Center.

Tara McCarty is a licensed speech language pathologist who worked in school-based settings for 7 years before returning to Penn State University to pursue doctoral studies. Tara's current research focuses on augmentative and alternative communication (AAC) design and intervention solutions for children with communication needs and cortical visual impairment (CVI).

Dr. Vicki Casella has been involved in the education of children and adults with special needs for over 55years. Her professional experience includes classroom and clinical teaching, public and private school administration, and university teaching and administration. She has taught at the University of Alabama, the University of Nevada, Reno, and San Francisco State University. While a professor in the Special Education Department at San Francisco State University, Dr. Casella initiated the first adaptive technology academic courses in the United States. Her areas of expertise were focused in teacher preparation in deaf/hard of hearing, learning and multiple disabilities and she was the Director of the Deaf and Hearing-Impaired Program. For the past 18 years she has served as the Executive Director of The Bridge School, a special school dedicated to ensuring that children with severe physical impairments and complex communication needs develop the education and communication the skills they need to become active participants in their communities and that the effective strategies employed at The Bridge School are disseminated throughout the national and international community.

TAKE AWAY PACKAGE

Name of student: Kathryn Chimienti
Parents: Dorilyn and Frank Chimienti
Interprofessional Collaborative Team:

- Francesca Crozier-F
- Tanya Mallan
- Anna Woodford
- Rebecca Holley

Dates:
June 12th – 17th 2022

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Disclaimer:
This document was created by the student's assigned interprofessional team at The Bridge School Summer Institute CVI/AAC. The team had access to the supervision of our Institute's presenters when requested, however as our staff was not part of the entire process, The Bridge School does not endorse the content of the information presented in this document.

Communication Forms and Functions:
Interview & Observational Worksheet

Child's Name: Kathryn **Informant:** Mother **Date** 6/14/22

Communicative Function	Sample Context	What child says/does	How communication partners respond
Request attention	Adult gives attention to another person	Looking to mom	Acknowledged her, gave choices
Request affection	Adult approaches child when hurt	Went to hug mom, put hands on mom's arms, gave mom hug	Partner give her affection and attention.
Request assistance	Child needs help with task	Reached out to hands	Mother verbalized "You need help". *Can model on SGD.*
Request information	Child sees something or someone new	Turning tags around - looking at colored dots/other things on tags, turning pages in book	Name or label information requested.
Request permission	Child wants to go outside	Reaching to go outside, standing up	Acknowledge her request (you want to _____), model on SGD
Request peer interaction	Child sees another child using a favorite toy	Walking to other students	Peers were busy at times, may have looked at her, adult communication partners acknowledged her interest and labeled peers
Request adult interaction	Looking up at adult	looking to mom, clinicians	Mom waves back in response and checks to see if she needs anything.
Request food or object	Wants object out of reach	reaching for books, other toys, requesting crackers	Acknowledged what she was reaching for (e.g., You want the book?) and then provided the item (When possible)
Refusal	Offer her something she doesn't like	No, all done, pushing things away, shaking head, will sign "all done", shake head, etc.	Partner acknowledged what she's communicating. Then communication partner may prompt her to use device to say "all done" or sign "all done".
Protest	Needs to participate in task & doesn't want to	Pushed objects away,	Partner acknowledged her action, may prompt her to sign "all done" or press "all done" on device
Cessation	Wants to be finished with meal or task	Pushing things away, all done sign	Partner acknowledged what she's communicating. Then communication partner may prompt her to use device to

			say “all done” or sign “all done”.
Greetings	A familiar person arrives or is leaving	Looking at adults, waved at us	Partners responded to greetings by waving
Affirmation	Ask her if she wants a favorite food.	Indicated yes with objects/snack, want to be done? —> said ‘yes’ on device. Will nod head, sign more, say “ba” for yes (verbal is most accurate)	Partner provided snack, acknowledging the message.
Comment: object	Sees an interesting person or object	Labeled red and green when talking about colors in book (after being presented a question of what colors do you see?)	Partner provided praise.
Comment: action	Sees an interesting action	Walking over to peer looking at device	Partner acknowledged her interest, labeled what they saw
Comment: mistake	Child accidentally spills or drops something	Not observed.	
Express humor	Adult laughs at something funny	Laughed at elmo	Partner acknowledged her enjoyment, continued to engage with elmo
Express confusion	Child is given an unfamiliar task	Not observed	
Express fear	Child hears something frightening	Mom noted she doesn’t express fear typically. Seems to enjoy the sensory experiences	
Express frustration	Child is having difficulty with a task.	Maybe with different book/change in activity, will say “I feel frustrated” on device when prompted and at times unprompted; will push brother, pinch, etc when frustrated with him - reported by mother	Partner may ask her to use her device to express frustration or sign that she was “all done”.
Express anger	Child has to stop doing favorite activity.	Not observed	
Express happiness	Child is doing a favorite activity	Laughing with elmo, when mom mentioned dancing - smiling/vocalization	Partner acknowledged behavior (e.g., “that was funny”)
Express sadness	Child experiences something sad.	Makes a sad face, sticks her bottom lip out (e.g., if she hurt something on her body), might cry	

Non-interactive comments	Utterances to direct own actions; echoed or routinized/habitual utterances to self		

CONCLUSIONS

Kathryn main mode of communication with her mom was through unaided modes of communication such as gestures, sounds and some signs. The goal for her would be to have a more efficient use of her aided modes of communications as they would support her to communicate a more varied communicative functions, vocabulary and would allow her to communicate with more communication partners, especially those who are not familiar with her.

As we will mention bellow, it will be very important to provide her with modes that are visually accessible and also offer her with ways to access them through other sensory channels when she is visually fatigued.

THE CVI RANGE

Student/child's name: Kathryn. Age/Birthdate: 11

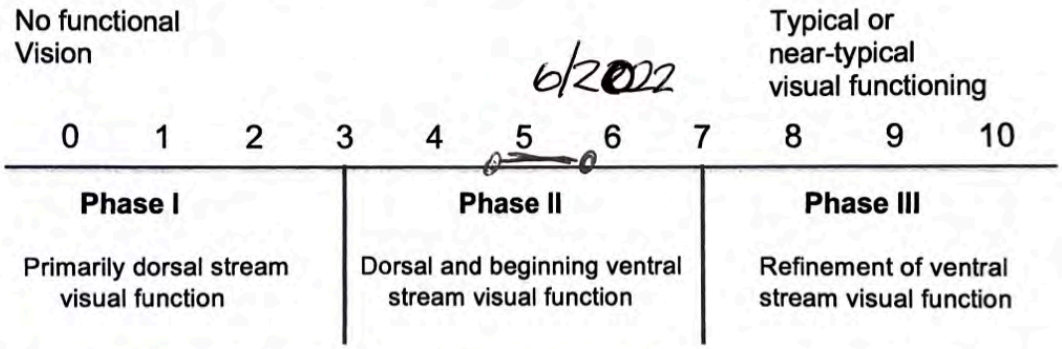
Evaluator(s): Tanya Rebecca Anna. Francesca Evaluation Date: 6/14 6/15

This assessment protocol is intended for multiple evaluations over a period of time.
Suggested scoring (no less than three times per school year):

a. Initial assessment (red)
b. Second assessment (blue)
c. Third assessment (green)

Further assessments will require a new form.

Totals:	Evaluation #1 (red)	Evaluation #2 (blue)	Evaluation #3 (green)
1. Range for Rating 1	5+		
2. Total for Rating 2	4.5		



The CVI Range: Across-CVI Characteristics Assessment Method

Rating I

Rate the following statements as related to the student/child's visual behaviors by marking the appropriate column to indicate the methods used to support the scores:

O = Information obtained through observation of the student/child
I = Information obtained through interview regarding the student/child
D = Information obtained through direct contact with the student/child

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In the remaining columns, rate each statement with one of the following descriptors:

R = Represents a visual behavior that is resolving or approaching typical behavior
+ = Describes current functioning of student/child
+/– = Partially describes the student/child emerging
– = Does not apply to student/child

The CVI Range: Across-CVI Characteristics Assessment Method

CVI Range 1-2: Student functions with minimal visual responses

O	I	D	R	+	+/-	-	
			R				May localize, but no appropriate fixations on objects or faces
			R				Consistently attentive to lights or perhaps ceiling fans
			R				Prolonged periods of latency in visual tasks
			R				Responds only in strictly controlled environments
			R				Objects viewed are a single color
			R				Objects viewed have movement and/or shiny or reflective properties
			R				Visually attends in near space only
				+			No blink in response to touch or visual threat
			R				No regard of the human face

CVI Range 3-4: Student functions with more consistent visual response

O	I	D	R	+	+/-	-	
			R				Visually fixates when the environment is controlled
			R				Less attracted to lights: can be redirected
			R				Latency slightly decreases after periods of consistent viewing
			R				May look at novel objects if they share characteristics of familiar objects
				+			Blinks in response to touch and/or visual threat, but the responses may be latent and/or inconsistent blink in response to touch intermittent
			R				Has "favorite" color
				+			Shows strong visual field preferences ↑R ↑L ↓ lower ↓ upper
			R				May notice moving objects at 2 to 3 feet
			R				Look and touch completed as separate events

CVI Range 5-6: Student uses vision for functional tasks

O	I	D	R	+	+/-	-	
				+			Objects viewed may have two to three colors
				+			Light is no longer a distractor
				+			Latency present only when the student is tired, stressed, or overstimulated
			R				Movement continues to be an important factor for visual attention
				+			Student tolerates low levels of background noise
				+			Blink response to touch is consistently present
				+			Blink response to visual threat is intermittently present
					+/-		Visual attention now extends beyond near space, up to 4 to 6 feet
X	X			+			May regard familiar faces when voices do not compete Mom/family 4-5W

blink to touch intermittent

CVI Range 7-8: Student demonstrates visual curiosity

O	I	D	R	+	+/-	-	
				+			Selection of toys or objects is less restricted; requires one to two sessions of "warm up"
				+			Competing auditory stimuli tolerated during periods of viewing; the student may now maintain visual attention on objects that produce music
						-	Blink response to visual threat consistently present
						-	Latency rarely present
						-	Visual attention extends to 10 feet with targets that produce movement
					+/-		Movement not required for attention at near distance
					+/-		Smiles at/regards familiar and new faces
					+/-		May enjoy regarding self in mirror
						-	Most high-contrast colors and/or familiar patterns regarded and interpreted
					+/-		Simple books, picture cards, or symbols regarded and interpreted

curious, walk up to explore @ near.

briefly look, brief eye contact w/ self

CVI Range 9-10: Student spontaneously uses vision for most functional activities at level approaching near typical

O	I	D	R	+	+/-	-	
							Selection of toys or objects not restricted to the familiar; visually curious in new settings
							Only the most complex environments affect visual response
							Latency never present
							No color or pattern preference
							Visual attention and interpretation extends beyond 20 feet
							Views and interprets information from non-backlit two-dimensional materials and simple images
							Uses vision to imitate actions
							Demonstrates memory of visual events
							Displays typical visual-social responses
							Visual fields unrestricted
							Look and reach completed as a single action
							Views and interprets information from non-backlit two-dimensional images presented on complex, visually dense backgrounds

K. Chimienti

The CVI Range: Within-CVI Characteristics Assessment Method

Determine the level of CVI present or resolved in the 10 categories below and add to obtain total score. Rate the following CVI categories as related to the student/child's visual behaviors by circling the appropriate number (the CVI Progress Chart may be useful as a scoring guide):

0 Full effect of the characteristic is present
.25 Behavior on this characteristic has begun to change or improve
.5 The characteristic is affecting visual functioning approximately half the time
.75 Occasional effect of the characteristic; response is nearly like that of individuals the same age
1 Resolving, approaching typical, or response is the same as others of the same age

1. Color Preference	0	.25	**.5**	.75	1
Comments: highly saturated necessary, specific color pref fading					
2. Need for movement	0	**.25** →	.5	.75	1
Comments: distracted by movement @ near					
3. Visual latency	0	.25	**.5**	.75	1
Comments:					
4. Visual field preferences	0	.25	**.5**	.75	1
Comments: ↑ peripheral R + L ↓ lower but emerging					
5. Difficulties with visual complexity- object	0	.25	**.5** →	.75	1
array	0	.25	**.5**	.75	1
sensory	0	.25	**.5**	.75	1
faces	0	.25	**.5**	.75	1
Comments: identifying/interpreting 2D images (realistic photographs w/ backlit)	0	.25	**.5**	.75	1
6. Need for light	0	.25	**.5**	.75	1
Comments: backlight necessary for sustained visual attn.					
7. Difficulty with distance viewing	0	**.25** →	.5	.75	1
Comments: up to 2-3 feet					
8. Atypical visual reflexes	0	**.25**	.5	.75	1
Comments:					
9. Difficulty with visual novelty	0	.25	**.5** →	.75	1
Comments:					
10. Absence of visually guided reach	0	.25	.5	**.75**	1
Comments:					

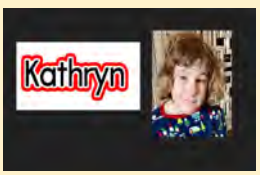
4.5

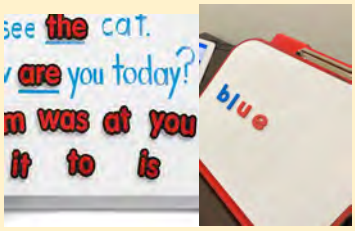
CVI Characteristics Observation Notes

Characteristic	Observations
Color	Bright, highly saturated colors elicit visual attention
Movement	Distracted by movement in near space (lit and non-lit), distracted by reflective/moving items on table (up to 3 feet); movement is a distractor
Visual Latency	More evident in the stressful, visual activities, some latency with finding light
Visual Field Preferences	Objects in Right field are more readily regarded, visually attending in both peripheral visual fields ; regarding and interacting with materials in central field Lower field deficit
Visual Complexity ● ARRAY	Black felt background more readily visually accessible than without 2 highly Complex patterns (swirls) found some goldfish in right upper quadrant Finding named object in array of letters, animals Animals : select from two dissimilar was completed easily Animals 3 or more similar challenging Letters 2 letters (dissimilar) easily located 3 letters-found b i p b i c w m (too complex) M from w , m from c (check against video for actual letters) Finding rhino 2D backlit device choice of 2 and 3 (array of 3) Choosing 3D figurine from 2 and 3
● TARGET/OBJECT	Animal figurines with highly familiar salient features recognized (cow, chicken, horse) Less familiar/similar features (rhino, elephant) more complex

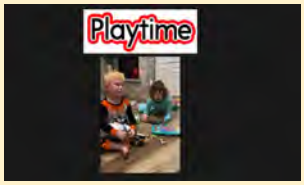
● SENSORY ENVIRONMENT	Voices and movement, especially unfamiliar can cause distraction In busy space, with conflicting cues-did not notice the yellow duck, but when searching on the table during observation, found and visually attended to red elmo
● FACES	Held gaze to her own image Looks at clothes, shirt, then up to face Has not worked on boy and girl yet Did identify girl smiling frmo non smiling (teeth vs closed mouth)
Need for Light	Backlit surfaces draw and retain sustained visual attention; task lighting helpful on targets on black background/slant board Light gazing not observed
Distance Viewing	Distracted by movement at near in her space (up to 3 feet) 12 inches to mom's face when fatigued; Prepared to avoid eggs on ground from 4 feet
Atypical Visual Reflexes	No blink to threat, intermittent touch at bridge of nose
Visual Novelty	Visually curious, drawn to new objects on table, to other devices of other children, new parts of the room, In highly complex array– busy room, outside sensory input, table with many other objects Kathryn was unable to find water bottle on the table (When asked using mom's language : your cup) In busy space, with conflicting cues-did not notice the yellow duck, but when searching on the table during observation, found and visually attended to red elmo
Visually Guided Reach	Look and reach are happening nearly at same time

CVI/AAC Schedule for School

Activity	Student Goal Communication Forms and Functions	AAC Tools, Strategies and Accommodations	CVI Accommodation (from The CVI Range Assessment)	Other (mobility, Tactile, Auditory, AT)
Activity 1: Morning circle/calendar 	1.Greetings 2.Name other students 3.Participate/take turns 4.Weather 5.Calendar	1.Model on high-tech device, low-tech model of icons (printed out) paired with activity (e.g., icon for sunny) when talking about weather. 2.Student names/photos on Touchchat 3.Models of greetings with partners (e.g., touching a greeting choice on device while Kathryn observes) 	1.Low tech: Kathryn can use a modified calendar (full with entire month for concept of calendar-ness and month as well as a daily, visually non complex display: black cardboard with velcro and delineated sections for day of week, Month, day, year) outlined with bubble words (month, day) and numbers (day, year) for Kathryn to create date in correct sequence.  (each a separate laminated card) https://roman-word-bubbling.appspot.com/ 2.Realistic image of each classmate, one per slide, with Bubble Letter name of classmate in Google Slide Story (pre teaching or for reviewing independently) to be displayed at Kathryn's desk, on slant board, individual (iPad Pro 12.9 in) 	1.Option to stand 2.Option to take a break by walking around the classroom or outside 3.Provide wait time when asked to respond to questions. 4.Seated near the front of the classroom/near the teacher.

Activity 2: Literacy/ Language Arts 	1.Listen to story being read 2.Answering questions out of an array of choices	1.Adapt stories to include repeated lines. 2.Program or find vocabulary words that correspond to repeated word/line in story. 3.Direct teacher to turn page, look at picture, read again, etc 4.Provide answer choices on a black background with a backlighting on a screen with simple photos or use Partner Assisted Scanning or a yes/no response to allow her to answer when visually fatigued.	1.Present modified versions of unique curriculum stories in Google slide platform : use Realistic photographs to highlight characters/ key objects /actions in (i.e. “Playtime”) paired with realistic image of the corresponding icon in her device 2.Invisiboard for Kathryn’s workspace to reduce complexity  3.Boom Cards activities to build emerging literacy skills such as letter recognition in an array of 2 and 3 ; Choosing letter sounds from array of 2 and 3 4.Use of Magnet letters with magnet sight words  5.Provide a visual model for Kathryn to reproduce on white board for spelling and writing activities 6.Allow for frequent visual breaks to allow for a trip to water fountain, a favorite video or iPad game (1-2 mins) before coming back to the activity https://www.lakeshorelearning.com/products/ca/p/LC341/?utm_source=google&utm_medium=ppc&utm_campaign=performancemax&gclid=CjwKCAjwqauVBhBGEiwAXOepkcM3_Ys6t64U0ImrnJXwJnW6dAZwY1JseclXkC2JaEBvchsqwif1cxoCBtgQAvD_BwE	1.Option to stand 2.Freedom to move between sitting and standing desk.  3.Option to take a break by walking around the classroom or outside 4.Provide wait time when asked to respond to questions. 5.Seated near the front of the classroom/near the teacher.

Activity 3: Math 	Responding to questions	1.Models on high-tech device of numbers/any related vocabulary 2.Low-tech screenshots of icons on device available for modeling 3.No-Tech:Consider developing a Consistent Partner Assisted Auditory Scanning (PAAS) communication option to scan choices when visual fatigue is present.	1.Use of bright-colored manipulatives such as numicons, foam magnet letters, number lines presented on a black surface or black surface (All-in-One) Board   2.Motivating Boom Card Activity in which Kathryn demonstrates number recognition in array of 2 and 3, begins matching manipulatives (dots/counters, numicons) to numeral to demonstrate number sense 3.Using bright colored magnet counters or other motivating manipulative (pom poms, spike balls) to create quantity, choose group that is “greater than” or “less than”	1.Option to stand 2.Freedom to move between sitting and standing at a desk. 3.Option to take a break by walking around the classroom or outside 4.Provide wait time when asked to respond to questions 5.Seated near the front of the classroom/near the teacher.

Activity 4: Peer buddy communication time 	1.Greeting 2.Name student 3.Choice of activity 4.Share social story or story from home about weekend or special activities with peers (Pictello, Google Slides, etc)	1.Training of peer on using device to provide models 2.Highly motivating objects/activities available to choose from vocabulary on device related to her preferred weekend activities and a way to access her story. 	1.Google Slide Stories available with backlighting on screen, black background, visually non-complex array i.e. picture, word, icon for device pulled OUT / separated onto its own slide 	1.Option to stand 2.Option to take a break by walking around the classroom or outside 3.Provide wait time when asked to respond to questions 4.Seated near the front of the classroom/near the teacher.

Roman-Lantzy, C. (2019). Cortical Visual Impairment: Advanced Principles. New York: APH Press.
The CVI/AAC Summer Institute, (2022). The Bridge School.

Activity

VLLCP FRAMEWORK

Adapted Vison, Language, Learning, Communication and Participation Framework

General Student Information

Child's Name: Kathryn	Date: 6/15/22
Phase: I **II** III	The CVI Range Assessment Score: 4.5 - 5++
Team Members: Francesca, Tanya, Rebecca, Anna	
Activity	

- Activity: Social
  - Social Story about interactions with younger brother
- Phrases or language used to motivate or prompt child's participation:
  - Modeling of vocabulary during story activity.
  - Expectant Pauses
  - Visually/ physically prompt by pointing to picture on SGD/highlight target picture with light.
  - Verbal Cue: Kathyrn, what would you say?
  - Book with CVI appropriate pictures of brother/animals

Characteristics of the Child, Vision, Language & Communication		
Language and Communication	**Vision**	**AAC-CVI Intervention**

Communication function to address for this activity: Function: • Social interaction • Express frustration • Request Information (about animals) Current form: • Use her voice; • Use body to express frustration-push, pinch, hit, etc Form to be used: • SGD with 2D images (photos) • Social story when SGD is not available	**CVI characteristics to be considered for this activity:** **Color:** highly saturated colors elicit visual attention and hold Kathryn's visual attention; color should be used to highlight letters and numbers and salient features in realistic photographs **Movement:** Movement at near/up to 4 ft can be a distraction; use of focus board around workspace/positioning student's desk away from the action of the classroom, positioning back to the busy sections (facing a back wall to reduce visual complexity, **Latency:** provide visual breaks between visually intensive activities (reading, math) to avoid visual frustration **Visual Field:** present materials on slant board or allow Kathryn to stand and access materials placed on an elevated desk. Recommendations to ease Kathryn back into wearing her prescribed glasses. **Complexity of object:** Kathryn is recognizing familiar animals, familiar people when presented as realistic photographs, preferably on a backlit device as paper realistic photographs become distracting; cartoon paper images presented in school cause frustration and Kathryn is not able to visually engage **Complexity of array:** When asked to identify or choose from an array of realistic photographic images, animal figurines Kathryn requires an array of 2-3 objects **Complexity of environment:** unfamiliar stimuli (songs, voices of peers) will cause distraction; focus board/Invisiboard **Complexity of faces:** Mom mentioned that Kathryn has not learned the concept of "boy" vs "girl" She is able to identify familiar faces when	**Communication Partner Strategies:** • Sensory environment without loud or unfamiliar stimuli • Reduce verbal coaching while Kathryn is visually attending and interpreting images, letters, numbers, and eventually words. • Kathryn's back to action in the room • Desk positioned away from action of the room (i.e. classroom door, windows, bathroom) • Black/non-patterned Clothing • Partner sitting next to rather than in front of Kathryn • Verbal description of salient features of topic (i.e. animals, letters, numbers, new daily object) • Visual breaks when fatigued **Environment:** • Reduce competing sensory input/Noise • Allow for tactual / auditory learning when visually fatigued or when visual learning is not accessible (noisy classroom, overstimulated) **Materials:** • Slant board • Backlit device (at desk instead of Smartboard/Promethean board in classroom) • Black occluder to reduce complexity of object/array • Color highlighting salient features of new/novel images of things/objects in stories • Objects single color/2 colors/more colors

	presented with realistic photographs. She makes brief direct eye contact with familiar and new faces; teachers should introduce themselves **Light:** Backlighting is necessary for Kathryn to visually attend and interpret **Distance:** Kathryn is visually attending and maintaining visual attention with learning materials at near with slant board; reduce visual complexity with Invisiboard **Visually guided reach:** Kathryn's visual contact toward a target (toy, blanket, animal figurine, picture) and reaching toward it to grab it is happening at the same time when provided with the adequate supports **Novelty:** pre-teaching salient features for animals, letters, words is necessary; realistic pictures included in Google Slide Stories	• Realistic photographs of people, objects in her daily routine • Materials related to activity: Backlighting SGD; back up paper copy with low glare laminate

Communication Tools Plan how child will express these functions? For example, activate a switch to play a message	**Strategies and Accommodations to Support Communication using AAC Tools**
No Tech (body-based)	Express frustration or interest by vocalizing, pushing things away, signing more/all done
Low-tech(non-electronic):	Social story physical copy; paper based copy of relevant vocabulary related to the social story.
High-tech (electronic):	SGD with appropriate visuals and vocabulary programmed into the system in a separate user area.
Supports for language comprehension	Modeling within meaningful activity; using familiar and realistic photographs to anchor story; bubble letters for target words when necessary (if new); Use prompts such as pointing to target, use backlit device to present story and elicit sustained visual attention to target.

Team debrief & reflect
What worked? ● The topic directly related to Kathryn's interests; realistic photographs of Kathryn, her family members and familiar toys were used and drew her into the story. ● Engaged and demonstrated visual attention to the language being used on her device as well as the pictures of familiar faces in the story slides ● Visually engaged while partner was modeling the keywords / target words (Mom, Dad, play, toys) ● Modeling ● Using a familiar "workspace" at a table with black curtains enclosing the workspace ● Black focus board to reduce complexity of work environment ● Simple black background for the Google Slides display ● Motivated by what she found funny –duck jumping "happy and you know it" ; once it was modeled how to ask for "jump," Kathryn independently located and said "jump" 3 more times What did not work? ● Distractions in the room ● Might work better if she was able to navigate the book herself - build more independence What questions came up? ● Which images are most supportive for Kathryn? ● How much space should there be between icons / how many icons should there be on the display per page ● What is the best icon representation? ● Positioning for the device (on walker with mount, at tabletop/desktop) ● Would a larger display with less vocabulary allow more "real estate" that would be more supportive of vision? ● Would a keyguard help support her use of current device ● Low-tech supports would help support her access to communication-Partner Assisted Scanning, paper copies of device grids? Look at the Communication Forms & Functions Worksheet, what functions are areas of need? - Use of functional vocabulary to direct others - Labeling - Responding to questions - More consistent yes/no

Rationale for our activity:

1. Increase use of different vocabulary in device (already going to groups/music more frequently, less consistent with other vocabulary)
2. Want to support language learning in motivating way
3. Learning functional communication skills with brother - how to more appropriately express needs
4. Learning about emotion expression, understanding emotions
5. Language learning with reduced visual complexity

Book about writing a social story: https://therapyshoppe.com/category/P454-new-social-story-book-using-social-stories-skills-fidgets-figits

Pictello app: https://www.assistiveware.com/products/pictello

What is a social story?

- The topic
    - Objective information, describes the context, situation, skill
- Ways to think about the topic
    - Information about processing the topic, including personal connections, problem solving…
- Connections and implications
    - Describes relationship between past, present, and future experiences and learning

How does this relate to receptive language?

- Reading story builds a predictable routine and repetition around an event, situation, or feeling
- Over time social stories support their understanding of events that happen in the past and ones that may happen in the future
- Offers focused language input to increase language comprehension

How does this relate to expressive language?

- A way to share with peers/partners
- Language that supports their feelings
- Gives child a script to communicate with unfamiliar partners

Implications for CVI

- Building and teaching routines around events
- Frequent repetitions of information
- Practice is beneficial
- Explicit description and teaching of the tools/materials/sounds may be helpful to increase understanding
- Understanding and expression of feelings

Recommendations for Next Steps

The goal of intervention in ***Phase II*** *is* ***to integrate vision in functional activities throughout the day.***
With the proper supports or "CVI overlay" that provide visually accessible learning materials, modified school and home environment that support visual access and a visual schedule for activities, throughout her day in extra curricular activities, to engage in social situations, provide a visually accessible component to recreational activities and to encourage Kathryn to use her vision to support learning. *The child is able to use vision in the context of activities and routines if the appropriate adaptations are in place. In this sense, intervention is geared toward adapting materials, presentation of materials, and the environment itself, to encourage the student to be able to visually attend to the important aspects and items in activities during the course of the day. Warm-up time and pre-teaching are required before more visually taxing activities and materials with which visual fixation is expected, and visual fatigue will occur when the environment or the task are complex or challenging. Children in Phase II often benefit especially from the creation of a CVI Schedule to plan visual adaptations and approaches.*

(Roman-Lantzy, 2018)

Based on her CVI Range Score of 4.5-5++, Kathryn would benefit from:

A visually accessible and CVI-adapted workspace for Kathryn in her classroom and home environment

- Black Invisiboard (APH)
- Solid color tray or mat, ideally black or dark gray, to cover Kathryn's workspace (desk surface)
- Black slant board or Large All in One Felt board for sorting activities (velcro, non-glare laminated pictures for letter/animal/number sorting by salient features activities)

Create a visually accessible CVI-specific overlay to Kathryn's communication device

- Trialing new icons with realistic images on a larger display, space between icons with black background, using Roman bubble letters instead of abstract icons in device
    - CVI Range
    - Forms and Functions
    - 2D Complexity Assessment
    - Learning Media Assessment
    - Case/mounting system that puts device in upper field
    - Keep current AAC device/overlay in place while exploring an alternate format.
    - Example:https://seecvispeakaac.com/
- Provide more visual access to her vocabulary. Increase ability and motivation to use the device to communicate

Find a visually accessible emerging literacy platform that is motivating for Kathryn and allows her to use her vision

- Kathryn can independently engage with an early literacy activity in which she is motivated to select the correct answer, recognize her name
- Google Slide Stories
- Pictello App: https://www.assistiveware.com/products/pictello
- Materials on backlit device with greater "real estate" for better spacing between items (iPad Pro 12.9in)
- BoomCards for motivating educational (adapted) activities
    - Data collection from BoomCards

Complete a 2D Image Complexity Assessment to determine Kathryn's present levels and thresholds when presented with 2D images on a backlit device

- 2D Complexity Assessment from Matt Tietjen or one created by TVI & team that relates to next year's curriculum

ACTION PLAN

GOAL: For Kathryn Chimienti Effective June 29, 2022						
Objectives	**How measure**	**Resources needed**	**By when**	**Potential barriers**	**Impact**	**Next steps**
Create and implement a home AAC/CVI schedule	Record data weekly	Collaborate with TVI, ABA Consultant, and Private SLP. List of daily activities (weekdays and weekends).	September 2022	Planning time with team. Efficacy of plan.	Access to language, predictability of day, increase interactions with family.	Expand to activities in the community.
Create social story for going to the dentist	Prepare for next visit on 9/24/22 to see how Kathryn will respond	With CVI accommodations, identify the purpose of the story, create vocabulary, provide visual supports and access to vocab on comm device. Gather photos from website or go to the actual office and take pictures.	September 2022	Time to create story. Will it be well received?	Ease anxiety when visiting the dentist. Access to language and interaction with professionals.	Create additional social stories.
Implement equipment so Kathryn's communication device can travel with her in all environments	Collect data across trials	Research websites and collaborate with school OT, TVI, and and AT specialist.	September 2022	Time to trial various types of equipment. Kathryn's mobility (currently uses crocodile walker, but can also walk short distances unassisted). Carrying anything in her hand or hanging on her body will throw off her balance. Team buy-in and collaboration.	Increase access to language	Research websites and collaborate with team
Kathryn will identify six two-letter words	Record data weekly	With CVI accommodations, boom learning cards with bubble lettering outlined in red, communication device.	September 2022	Will methods be well received?	Increase literacy skills	Create boom cards and communication device modifications.

		Collaborate with TVI and SLP.				
Kathryn will identify the representation of numbers 1-5	Record data weekly	With AAC Accommodations, numicons tools, touch match, two dimensional objects. Collaborate with TVI and OT.	September 2022	Will methods be well received?	Apply number concepts in daily activities	Obtain numicons and touch math materials